IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

application of:

ERRY A. BENNETT

Group Art Unit:

Examiner:

Sean E. Vincent

Serial No.:

09/884,848

Filed: June 19, 2001

SYSTEM AND METHOD FOR FORMING AND QUENCHING GLASS For:

SHEETS

Attorney Docket No.: GLT 1773 PUS

DECLARATION UNDER 37 C.F.R. § 1.132

Mail Stop RCE Commissioner for Patents U.S. Patent & Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

- I, Terry A. Bennett, declare as set forth below.
- 1. I have a bachelor of science degree in mechanical engineering from Pennsylvania State University in State College, Pennsylvania.
- 2. I have been employed in the glass industry for 35 years and am currently employed by Glasstech, Inc. of Perrysburg, Ohio which is the assignee of the above patent application for which I am the sole inventor.
- 3. Due to my education and background I believe I am an individual who has at least ordinary skill, and actually more than ordinary skill, in the glass industry.

CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.8

I hereby certify that this paper, including all enclosures referred to herein, is being deposited with the United States Postal Service as first-class mail, postage pre-paid, in an envelope addressed to: Mail Stop RCE, Commissioner for Patents, U.S. Patent & Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450 on:

May 19, 2003 **Date of Deposit**

James A. Kushman Name of Person Signing

4. I have studied the pending claims 1-12 of the subject application and have also studied United States patent 5,735,922 Woodward et al. and the published French patent application 2 221 409 of Nedelec as well as the final Office Action dated February 25, 2003 in which claims 1-12 have been rejected as being unpatentable over these references.

- 5. The inclined rollers 41 of the Woodward et al. patent are located outside of the heated environment of the furnace. Such glass furnaces have a heated environment in excess of 650°C where the roller support apparatus of Woodward et al. would not be operable for reasons set forth below.
- 6. The rollers 41 of Woodward et al. are rotatively driven by flexible driveshafts 51 as shown in Figure 5 and described in column 9, lines 29-32. Such flexible driveshafts include a metal sheathing through which a flexible spring drive cable extends. Heating of such flexible driveshafts to the temperature involved to perform glass sheet bending would result in thermal expansion that would create binding between the spring drive cable and the metal sheathing so the flexible driveshaft would be inoperable. Furthermore, the heating would cause the spring steel material involved to anneal and lose tensile strength as well as oxidizing so that the sheathing and the flexible driveshaft will freeze to each other and not be operable.
- 7. The rollers 41 of Woodward et al. have inclination that is adjustable by arcuately slotted plates 52 which are clamped by an unnumbered wing nut, and the rollers are also angularly positioned on a horizontal plate 54 that is clamped by wing nuts as shown in Figure 5 and discussed in column 9, lines 32-40. Such wing nuts and suitable threaded studs or bolts utilized with the wing nuts due to thermal expansion and oxidation when utilized in a heated environment will freeze together so that the intended adjustability provided thereby would not be possible.

- 8. The rollers 41 of Woodward et al. have lateral translational adjustment provided by a threaded shaft 56 that extends through a turret 55 and a nut 57 mounted on the plate 54 as shown in Figure 5 and described in column 9, lines 40-44. This threaded shaft, turret and wing nut would not be operable in the heated environment of a glass furnace because due to thermal expansion and oxidation, the threaded shaft would bind and freeze together with the turret and nut so that the intended adjustment provided thereby would not be possible.
- 9. While the French Nedelec patent does disclose conveyor rollers located within a furnace heating chamber, these rollers all tilt together and do not suggest progressively inclined rolls located within the heating chamber of a furnace to provide bending in accordance with the present invention.
- 10. Furthermore, I do not believe it would be obvious to combine the disclosures of Woodward et al. and the French Nedelec patent as proposed by the Examiner in the Office Action because the roller support apparatus of Woodward et al. as set forth above would not be operable within the heated chamber of the Nedelec furnace and an inoperative combination would thus result because no driving or adjustment would be possible for reasons set forth.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Dated: 14,03

TERRY A. BENNET